Cancel claim 25 without prejudice and substitute therefor:

38. A system for forming an optical image comprising:

(a) a complimentary screen of a two dimensional array of N (a real number) pixels, from which raster elements are to be generated;

(b) a raster multiplying system comprising passive (non-controllable) elements to simultaneously form P raster elements from the pixels of said complimentary screen according to a number of P constituent blocks of an image to be simultaneously formed on an image display plane by separating said P raster elements into corresponding light beam components, each having a part of initial beam intensity, and transmitting light corresponding said N pixels to modulation means and then to an image display plane so that one of said P raster elements is projected onto a corresponding one of said P blocks;

(c) an array of controllable light modulators to simultaneously and independently modulate each of said P raster elements for each of said P blocks, according to control signals applied separately for each block, each modulator having an optical output to coincide with a block of the image; and

(d) an image display plane on which an image with a resolution of M pixels is formed and displayed in a form of a matrix image comprising said constituent blocks as matrix elements, a said block comprising a two dimensional array of pixels, where the number M exceeds number N where said blocks are placed in the order of the light paths generated from the complimentary screen.

Amend the following claims:

26. (Amended) A system as in claim 38 wherein said raster multiplying system comprises an array of coordinated light dividing elements to divide and direct received light on said image display plane.

27. (Amended) A system as in claim 38 further comprising a holograph generator for producing a three dimensional holographic image on said display plane.

Cancel claim 28 without prejudice and substitute therefor:

39. A system for image recording comprising:

(a) a complimentary screen having a two dimensional array of N (a real number) pixels, from which raster elements are to be generated;

(b) a raster multiplying system comprising passive (non-controllable) elements to simultaneously form from the pixels of said complimentary screen a plurality of raster elements each having a corresponding beam component and having a part of initial beam intensity, and for transmitting light corresponding to one of said P raster elements to one of P image blocks; and

(c) a sensitive plane on which an image to be recorded is projected and which is scanned to convert light information into electric signals for recording, said

image being presented as a matrix image comprised of a plurality of said blocks as matrix elements with a block comprising a two dimensional array of pixels, and all the blocks comprising M pixels, where the number M exceeds the number N, and where said blocks are placed in the order of the light path generated from complimentary screen in emitted light path order.

29. (Amended) A system as in claim 39 further comprising means for optic compression of generated raster elements for increasing the dot per inch resolution of scanning light beams.

Cancel claim 30 without prejudice and substitute therefor:

40. A method for forming an image on an image display plane by simultaneous forming of P constituent blocks of said image, so that the image is presented as a matrix image with blocks as matrix elements, a block having a two dimensional array of pixels, comprising the steps of:

(a) providing a complimentary screen having a two dimensional array of N pixels to generate a raster for a block of an image;

(b) separating a raster element corresponding beam into beam components, each component having a part of initial beam intensity, to simultaneously form P different raster elements, one element for each of P blocks;

(c) transmitting the formed beam components to an array of light

modulators which independently modulate each of said raster elements in accordance with control signals applied for each of said P blocks;

(d) repeating the procedure by successively generating other raster elements from said complimentary screen, to simultaneously form a modulated raster in each of P blocks and displaying said P blocks on said image display plane in the form of an image, said image having a resolution of M pixels, where M is greater than N.

Cancel claim 31 without prejudice and substitute therefor:

41. A method as in claim 40, wherein a raster element comprises more than one pixel, different raster elements overlap on image display plane.

32. (Amended) A method as in claim 40 wherein the step of forming said plurality of blocks of an image to be displayed comprises forming fragments of a hologram, and further comprising generating said hologram as a three dimensional holographic image on said image display plane.

33. (Amended) A method for image forming as in claim 40 used for producing hard copy of an electronically formed holographic image, further comprising:

generating the holographic image;

projecting the formed image on a photosensitive material;

forming a hologram on the photosensitive material; and

developing the photosensitive material.

Cancel claim 34 without prejudice and substitute therefor:

42. A method of recording an image of M pixels on a sensitive plane and presented as a matrix image, with blocks as matrix elements, and a block having a two dimensional array of pixels, via simultaneous scanning P constituent blocks of said image, comprising the steps of:

(a) using a complimentary screen having a two dimensional array N (a real number) of pixels, where N is less than M, to generate an element of a raster for a block of an image;

(b) separating a raster element beam into corresponding beam components, each component having a part of initial beam intensity, and projecting said components on said sensitive plane to simultaneously form P different raster elements, each said raster element corresponding to one of said P blocks; and

(c) repeating the procedure by successively generating other raster elements on said complimentary screen to simultaneously scan each of P blocks and converting the image information received on said sensitive plane by the projection of said beam components into output electric signals for recording.

Cancel claim 35 without prejudice and substitute therefor:

43. ~~(Amended)~~ A method as in claim 42, wherein a raster element comprises more than one pixel and different raster elements overlap on said image display plane.

36. (Amended) A method as in claim 41 wherein generated raster elements are subject to additional optical compression for increasing dot per inch resolution of a sensitive plane scanning beam.

Add the following claims:

44. ~~(Amended)~~ A method as in claim 40 wherein a raster element is of the size of a pixel.

45. ~~(Amended)~~ A method as in claim 42 wherein a raster element is of the size of a pixel.

46. A system as in claim 39, further comprising more than one said complimentary screen.

47. A method as in claim 40 further comprising the step of using more than one complimentary screen.